

# System and Method for Using First-Principles Simulation to Characterize a Semiconductor Manufacturing Process

## ABSTRACT OF THE DISCLOSURE

A method, system and computer readable medium for facilitating a process performed by a semiconductor processing tool. The method includes inputting data relating to a process performed by the semiconductor processing tool, and inputting a first principles physical model relating to the semiconductor processing tool. First principles simulation is then performed using the input data and the physical model to provide a simulation result for the process performed by the semiconductor processing tool, and the simulation result is used as part of a data set that characterizes the process performed by the semiconductor processing tool.

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